whether or not the fragment or variant of the antibody must also have the activity of binding to a thrombopoietin receptor.

Applicants have cancelled Claims 43-45, thereby rendering the rejection moot with respect to these claims. Claims 46-48 has been amended to depend (either directly or indirectly) from newly added Claim 50, which does not contain the phrase "a thrombopoietin receptor". Applicants respectfully submit that the claims pending in the present application are sufficiently definite and respectfully request that this rejection be reconsidered and withdrawn.

**Rejection under 35 U.S.C. §112, first paragraph**

On page 3 of the Office Action, Claims 43-48 have been rejected under 35 U.S.C. §112, first paragraph, for lack of enablement. In particular, the Examiner asserts that the claims are only enabled for nucleic acids encoding agonist antibodies to mpl or c-mpl.

Applicants have cancelled Claims 43-45, thereby rendering this rejection moot with respect to these claims. Claims 46-48 have been amended to depend (either directly or indirectly) from newly added Claim 50, which recites that the nucleic acid encodes an agonist antibody, fragment or variant thereof which binds to human c-mpl.

In view of the above, Applicants submit that the claims of the present application are enabled and respectfully request that the Examiner reconsider and withdraw this rejection.

**Rejection under 35 U.S.C. §103(a)**

On pages 4-5 of the Office Action, Claims 43-48 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Deng et al. or Avraham et al. (U.S. Patent No. 5,980,893) in view of Bennett et al. (5,635,388).

Applicants respectfully traverse this rejection in view of the following remarks.

To begin with, Claims 43-45 have been cancelled, thereby rendering this rejection moot with respect to these claims. Claims 46-48 have been amended to depend from newly added Claim 50, which claims an isolated nucleic acid that encodes an agonist antibody, fragment, or variant thereof which binds to human c-mpl, wherein the antibody, fragment or variant thereof is Ab1, Ab2, Ab3, Ab4, Ab5 or Ab6, wherein each Ab1-Ab6 comprises a VH and VL chain, each VH and VL chain comprising CDR amino acid sequences designated CDR1, CDR2 and CDR3 separated by framework amino acid sequences. Applicants respectfully submit that there is no teaching or suggestion in any of the Examiner's cited references of an isolated nucleic acid that encodes an agonist antibody, fragment, or variant thereof that binds to human c-mpl as claimed in Claim 50. With respect to newly added Claim 49, Applicants submit that there is no teaching or suggestion in the Examiner's cited references of an isolated nucleic acid that encodes an agonist antibody, fragment, or variant thereof selected from the group consisting of 12E10, 12B5, 10F6 and 12D5. Therefore, the present claims are not obvious.

Even if the Examiner argues that Bennett et al. teach that conventional methods are known to isolate and sequence DNA, the existence of a general method of isolating DNA molecules does not suggest the claimed nucleic acid. (See, In re Deuel, 34 USPQ2d 1210 (Fed.

Cir. 1995)). Thus, Applicants submit that newly added Claims 49 and 50 are non-obvious and patentable.

Further, the combination of the Examiner's cited references would not result in the invention set forth in Claims 49 and 50. Assuming, *arguendo*, that Bennett et al. teaches that DNA in general can be readily isolated and sequenced, the result of the combination of the teachings of Deng et al. or Avraham et al. with Bennett et al. would be the isolated nucleic acid sequence for BAH-1, not the isolated nucleic acid sequence of 12E10, 12B5, 10F6 or 12D5 of Claim 49, or the isolated nucleic acid sequences set forth in Claim 50.

With respect to newly added Claims 51-53 and 56-57, Applicants submit that there is no teaching or suggestion in either Avraham or Deng of a human antibody, a humanized antibody, a non-naturally occurring antibody, a single chain antibody, or a monoclonal antibody as presently claimed. Further, there is no teaching or suggestion in the cited references of a nucleic acid that encodes an agonist antibody that stimulates megakaryocytes to produce platelets as claimed in Claims 54–55.

In view of the above, Applicants submit that the present claims are not obvious over Deng et al. or Avraham et al. in view of Bennett et al. and respectfully request that this rejection be reconsidered and withdrawn.

## CONCLUSION

In light of the above, Applicants believe that this application is now in condition for allowance and therefore request favorable consideration.

If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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**MARKED-UP COPY OF AMENDED CLAIMS**

46. (Amended) A vector comprising the nucleic acid of Claim [43] 50.